



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,452	10/27/2003	Tushar Prakash Ringe	1738.003US1	2488

7590 11/04/2005  
GOBAL IP SERVICES, PLLC  
C/O PORTFOLIOIP  
P.O. BOX 52050  
MINNEAPOLIS, MN 55402

EXAMINER
----------

CORRIELUS, JEAN B

ART UNIT	PAPER NUMBER
----------	--------------

2637

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/694,452

Applicant(s)

RINGE ET AL.

Examiner

Jean B Corielus

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-19, 21-24 and 27-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-17, 23 and 24 is/are allowed.
- 6) ☒ Claim(s) 2-8, 18, 19, 21, 22 and 27-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### **Specification**

1. Specification page 9, line 18, "boundary 310" should be replaced by "boundary 330".
2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "each of the received primary period and primary width updates occurs across **or within** a PWM signal boundary of a current PWM signal being generated" does not have proper antecedent in the specification, as recited in claims 2 and 27.

### ***Claim Objections***

3. Claims 3-13, 18-19, 23, 24, 27-3 are objected to because of the following informalities:

The dependency of claim 3 should be changed to "claim 2" as claim 1 is a canceled claim.

Claim 4, line 4, after machine, "is" needs to be inserted.

Claim 6, line before last, "a width" should be "the width so as to make use of antecedent in claim 3, line 16.

Claim 7, line before last, "a" should be "the".

Claim 8, line 7, before "to", "is" should be inserted. the same comment applies to line 9.

Claim 9, five lines before last, before "to", "is" should be inserted.

Claim 18, line 1, "an" should be deleted.

Claim 23 recites a series of "means". in order for the claim to be treated as a means plus function type claims, the claim should be amended to replaced "a means to" by "means for; line 4, shouldn't " the microcontroller " be replaced by "a microcontroller core" ? the same comment applies to line 6 and line 10 and claim 24; 3 lines before the last, "an expired" should be "said expired", in both occurrences, so as to make use of antecedent in lines 7-8.

Claim 24, "a PWM" should be "said PWM".

Claim 27, line 4, "can occur" should be replaced by "occurs".

Note that any claim whose base claim is rejected is likewise rejected.

#### ***Information Disclosure Statement***

3. The information disclosure statement filed 6/27/05 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3-8, 18-19, 21 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2637

Claim 3, line 16, "the width update counter signal" lacks of proper antecedent basis.

Claim 18, line 2, "the expired width value" lacks of proper antecedent basis.

Claim 21, line 3, "the received period and width value" lacks of proper antecedent basis;

Four lines before last, "the width write counter signal" lacks of proper antecedent basis.

Note that any claim whose base claim is rejected is likewise rejected.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 2-8 and 27-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 2 recites that "each of the received primary period and primary width updates occurs across or within a PWM signal boundary of a current PWM signal being generated". However, the specification does not teach how to configure the apparatus/processor so that the primary period and primary width updates occurs only **across or within** a PWM signal of a current PWM signal being generated. Without that information, one will not be able to make and or use the invention as claimed. The same comment applies to claim 27 and each of the dependent claims.

***Allowable Subject Matter***

Art Unit: 2637


8. Claims 9-17, 23 and 24 are allowed. However, the claim must be amended if necessary to overcome any objection set forth above.

9. Claims 18, 19, 21 and 22 would be allowable if amended to overcome the 112 rejection sets forth above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Maxi-Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jean B Corrielus  
Primary Examiner  
Art Unit 2637 11-2-05